Training of Trainers on:

“Scaling of Africa RISING project validated technologies/innovations in the Ethiopian Highlands

2-4 May 2017, Madda Walabu University, Bale Robe, Oromia

**Trip Report**

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We participated in the Training of Trainers (ToT) workshop at Madda Walabu University in the highlands of Ethiopia, organised by the AR-Ethiopia Project. The proceedings of the workshop will be posted on the AR website, and this is only a summary of our observations at the workshop. The objectives of the training were:

1. To introduce and familiarize development partners the already validated Africa RISING project technologies/innovations in the Ethiopian Highlands.
2. To equip technical staff of partner institutes with skills and knowledge of the management of each technology/innovations.
3. To jointly plan the implementation process for Africa RISING phase II.

The conduct of the workshop was effected through five main sessions (our view): (i) Opening, (ii) presentations by the development partners on their capacities in the plenary, (iii) presentation on technology development and scaling experiences by Africa RISING researchers in thematic sessions, (iv) developing and presentation of scaling workplans, and (v) a field visit to selected on-going scaling activities.

*Opening session*

We were welcomed to the workshop by both the AR Ethiopia Project management and the host, Madda Walabu University, which is partner in the project and provides office facilities for the project regional management. This was followed by self-introductions, a presentation on transitioning from AR Phase I to Phase II, and a presentation on gender integration in Africa RISING innovations scaling. Curiously, there was a disproportionate representation of women in the about 70-strong participants group, reflecting more on institutional choice of representatives to the workshop.

*Presentations by the development partners on their capacities*

The invited institutions made presentations on their capacities in terms of validated technologies within their institutions and for taking them to scale. Apparently, government support to these institutions includes budget lines for research and dissemination activities, and one institution stated that the government support was increasing steadily over the years. Africa RISING then conducts back-stopping action research and is a rallying organisation for bringing these partners together. These institutions were mainly universities and research institutions which present a stark difference from what are considered as development institutions in ESA and WA. Universities and other NARs are engaged mainly as research partners in ESA and WA because they receive support from AR. They too have a mandate and willingness for scaling but have limited resources to effect it.

*Presentation on technology development and scaling experiences by Africa RISING researchers (Objective 1).*

Parallel session presentations were made to three thematic groups namely, livestock, crops and natural resource management (NRM). The “technology promoters” were specialists in these areas, mainly led by scientists from the CGIAR institutions. Mateete participated in the NRM group. The presentations were reflections on the success of technologies applied elsewhere in Ethiopia and mainly based on biophysical data as indicators. The success of the landscape type of technologies was also based on the community arrangement unique to Ethiopia where adults in the farming communities must each contribute 20-40 working days in a year to install structures necessary for rehabilitation and sustainable management of land resources (among other community activities). The role of Africa RISING and other land management research institutions is to guide in the design of, and how to install appropriate technologies; free labour is available for the actual installation. In ESA, AR is advocating for by-laws that could invoke similar community engagement. Because the sessions were parallel, it was not clear how and when multi-discipline integration would occur. Asamoah attended the livestock group. Here, tree Lucerne planting and agronomic management; cattle feeding trough and crop residue management; and forage seed production were presented. The group discussed their experiences with the technologies, and made suggestions on how they scaled-out.

*Developing and presentation of scaling workplans (Objective 3).*

Again, this was conducted in parallel sessions but based on institutional arrangements. This presented the opportunity for the meeting of the Chief Scientists, so we did not participate in any planning session. We participated in the plenary presentations of the workplans. Generally, the workplans described what each development institution would be responsible for in terms of technologies to take to scale and targets to achieve, and based on the financial resources at their disposal. The technologies reflected more of institutional specialisations.

*The field visit*

We visited a homestead where livestock activities (the feeding trough, livestock fodder – napier grass and tree Lucerne) were being demonstrated (see photo). Apple trees were introduced within the tree lucerne component. Next was the potato seed preservation structure and the fields where irrigated potato was introduced as an alternate crop to wheat. We were treated to a demonstration of the two-wheel multipurpose tractor working as an irrigation pump. Lastly, we visited an apple fruit seedling production unit supervised by ICRAF.



The feeding trough (left) and the fodder plots (right: napier in the foreground and tree lucerne in the background)

**Observations**

1. We are very grateful for the smooth arrangements made by the AR-Ethiopia team for our participation in the workshop. The scenic drive to Oromia will be memorable.
2. The Ethiopia setting presents a very different and more favourable environment for delivering and taking technologies to scale, compared to ESA and WA. There is reasonable government resource investment in, and policy support/guidance to national and local research and development institutions, which makes AR play a more complementary role. Community arrangement and labour contribution to community activities drive the success of implementation of watershed-based technologies. Despite these advantages, there are some challenges which are common with what we face in ESA and WA, as described in the following bullets.
3. There appeared to be need for more effort in presenting integrated technologies to scaling. Those we visited were more discipline-based and workplans were not forthcoming on integration either. ESA and WA too, have this challenge to address. We can still use these discipline-based activities as entry points for other disciplinary activities, but which should be planned in advance to be better integrated.
4. The demonstrations for scaling present opportunities for value-added research to the introduced technologies. At the livestock stop, we discussed development of alternative feeding scenarios for prioritising feeding between milk production and ploughing oxen as markets dictate (trade-off scenarios). The effects of potato as a replacement crop on the environment under different pest and irrigation management regimes in different soils also needed research attention. This is in line with our new approach of defining validation of technologies being inclusive of more SI indicators.
5. Targeting where to scale particular technologies did not feature clearly in the workplans. Institutional workplans were more on reaching farmers/households (numbers), not which farmers or which environments. We all are still grappling with how best we can put typology to productive use.
6. Documenting the technologies in formats that can easily be readily applied by development partners is quite incomplete. In ESA, our technologies are also not well described, and so is the same in WA as we learned in the Chief Scientists meeting. It became an agenda item on the Chief Scientists meeting, out of which a definition of an AR validated technology was proposed to having met certain requirements.
7. We thought that the title of the workshop, Training of Trainers, did not reflect the true character of the workshop which laid more heavily on planning for implementation than on training. But these are semantics, and we consider that the workshop was successful.